

**CLAIMS**

1. (after amendment) A method for analyzing specimen molecules which comprises:  
a step to cause flowing of a solution containing the specimen molecules and a solution containing probe molecules capable of forming a complex with the specimen molecules in a micro flow channel in such a fashion that a laminar flow is formed;  
a step to selectively promote diffusion of the complex formed according to the affinity in the laminar flow, and  
a step to detect and analyze the degree of diffusion of the complex formed between the specimen molecules and the probe molecules.
2. The method of analysis described in Claim 1 in which the aforementioned probe molecule is a molecule capable of emitting fluorescence.
3. The method of analysis described in Claim 1 in which the detection and analysis of the degree of diffusion of the aforementioned complex are carried out by making reference to a calibration curve prepared beforehand.
4. (after amendment) A method for analysis of a DNA fragment which comprises:  
a step to cause flowing of a solution containing a DNA fragment of a specified sequence as a specimen molecule and a solution containing a probe molecule capable of forming a complex with the specimen molecule in a micro flow channel in such a fashion that a laminar flow is formed;  
a step to selectively promote diffusion of the complex formed according to affinity in the laminar flow; and  
a step to detect and analyze the degree of diffusion of the complex formed between the specimen molecule and the probe molecule.